## WALNUT & INDIAN CREEK WATERSHED

Conservation Spotlight



## **BUILDING A POND**

By Dan Case

September has been a busy month for pond construction! IDALS provides fantastic cost share opportunities to construct them anywhere in the Nishnabotna watershed. If you would like a pond, contact us today! Read on to see some of the many steps in constructing a pond.



The first step in building a pond is to clear and grub the site, which clears the area of all roots, brush, and debris.

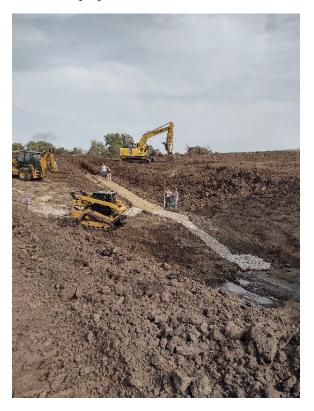
The next step is to dig the core trench and fill it with good clay to keep the pond from leaking. After that, dirt is hauled in to reach pipe grade.



With larger dams, a sand drain and collar are installed for the pipe. A collar is a fifteen-foothigh sand wall that stops and outlets the water from the pond into the drain. The picture below shows the collar being dug.



The end of the drain has a small gravel filled area with riprap on the end.



The top end where the collar meets with the drain must be flooded with water, and then vibrated to settle the sand used to make the collar.



The next step is to build the pipe support.



Once the support is built, the pipe is then laid and tamped.





After the pipe is laid, the pipe support is finished, and then the workers begin bringing in fill and building up the sand collar, four feet at a time. This requires putting in fill dirt, then digging back down to the collar, and continuing to place the sand. When doing this, it is always a good idea to mound up some waste sand over the pipe before digging down the first time, so that the backhoe does not damage the pipe.









After the collar is complete, it is smooth sailing! The next step is to finish up the earthfill and cutting an emergency spillway.



Next, the dam is finished, a trash rack is placed over the pipe, and the land surrounded the pipe is seeded. With this step, mulching is highly recommended.





Then... just let it rain!

